



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/822,466 | 04/12/2004 | Richard Marcis | DKT02184 | 3136 |

7590 09/09/2005

BorgWarner, Inc.
Patent Administrator
3850 Hamlin Road
Auburn Hills, MI 48326-2872

EXAMINER

NGUYEN, NINH H

ART UNIT PAPER NUMBER

3745

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/822,466

Applicant(s)

MARCIS ET AL.

Examiner

Ninh H. Nguyen

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7 and 10 is/are rejected.
- 7) ☒ Claim(s) 4, 8, 9 and 11-22 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2, 5, and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, line 5, the term “maybe” is confusing because it is unclear whether the single actuation post is attached to a vane extension or not.

Similarly, in claim 5, line 3, the term “maybe” is also confusing because it is unclear whether the flange is a part of the turbine housing or not. Claim 6 is indefinite as being dependent on claim 5.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 3745

2. Claims 1, 3, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Berg (4,657,476).

Berg discloses a vane for use in a variable geometry exhaust gas driven turbocharger (Figs. 2-5), comprising a vane body 48 adapted for pivoting around a pivot axis, the vane body having first and second planar surfaces perpendicular to the pivot axis on respective axial ends (Fig. 5), a vane bore 66 in the first planar surface adapted for receiving a vane post therein perpendicular to the first planar surface, a single actuation post 68 extending perpendicularly from the first planar surface; and means 42 for pivoting the plurality of vanes.

Regarding claim 3, Berg discloses a variable turbocharger geometry assembly (Figs. 1-5) comprising a turbine housing 10 with at least one supply channel 14 in the turbine housing for supplying exhaust gas, at least one turbine wheel (not shown) rotatably supported on a shaft within the turbine housing, the at least one supply channel being arranged to supply the exhaust gas to the at least one turbine wheel, a plurality of static pivot points arranged as a ring of elements 20, a ring of actuation elements 42 coaxial with the plurality of static pivot points arranged as a ring of elements 20, an array of vanes 48 adjacent to at least one of the plurality of static pivot points arranged as a ring of elements 20 and the ring of actuation elements 42, vane posts 24 extending between the plurality of static pivot points arranged as a ring of elements and the array of vanes, and actuation posts 68 extending between the ring of actuation elements and the array of vanes wherein a pivoting movement of the rings relative to the other, causes pivoting movement of the array of vanes.

Art Unit: 3745

3. Claims 1, 7, and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Arnold (6,672,059)

Arnold discloses a vane for use in a variable geometry exhaust gas driven turbocharger (Figs. 1-4), comprising a vane body adapted for pivoting around a pivot axis, the vane body having first and second planar surfaces 84, 86 perpendicular to the pivot axis on respective axial ends (Fig. 4), a vane bore 96 in the first planar surface adapted for receiving a vane post 68 therein perpendicular to the first planar surface, a single actuation post 64 extending perpendicularly from the first planar surface; and means 40 for pivoting the plurality of vanes;

wherein the means for pivoting the plurality of vanes comprises an actuator ring 40 (Fig. 2) having an actuator ring first surface parallel to and adjacent to each of the first planar surface and having a plurality of slots 44 therein perpendicular to the actuator ring first surface for receiving the actuation posts from the vanes, wherein rotation of the actuator ring causes each actuation post to slide within its respective slot, moving each vane radially relative to the respective pivot axis.

Allowable Subject Matter

4. Claim 4, 8, 9, and 11-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Claims 2, 5, and 6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Prior Art

The prior art made of record but not relied upon is considered pertinent to applicant's disclosure and consists of 2 patents.

Possell (4,232,992) and Arnold (6,419,464) are cited to show different variable geometry turbochargers.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Ninh Nguyen whose telephone number is (571) 272-4823. The examiner can be normally reached on Monday-Friday from 7:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look, can be reached at (571) 272-4820. The fax number for this group is (571) 273-8300.

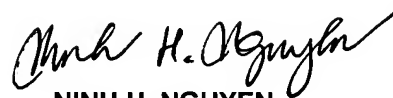
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Application/Control Number: 10/822,466

Page 6

Art Unit: 3745

system, please go to <http://pair-direct.uspto.gov> or contact the Electronic Business center (EBC) at 866-217-9197 (toll-free).


NINH H. NGUYEN
PRIMARY EXAMINER

Nhn
September 3, 2005